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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,291	02/23/2004	Takashi Moriguchi	848075/0073	2076

29619 7590 07/09/2007
SCHULTE ROTH & ZABEL LLP
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EXAMINER

KARIKARI, KWASI

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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07/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/785,291	Applicant(s) MORIGUCHI ET AL.	
	Examiner Kwasi Karikari	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/23/2007 has been entered.

2. Claims 10 and 11 have been added.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification mentions "an image to be taken" and "camera module 140 coincides with the optical axis" but the specification is specifically unclear about "**said optical axis**

of said camera module substantially coincident with said axial line” and as to what element(s) constitute the **“image- taken element”**. The examiner also points out that claims 1 and 7 do not specifically define the direction of the mobile terminal in relationship with the “optical axis” and the “axial line”.

For examination purposes, the Examiner would treat the rejected claimed limitations, the **“said optical axis of said camera module substantially coincident with said axial line”** and the **“image- taken element”** in the broadest interpretation of the overall concept of Applicant's specification. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 3, 5, 6, 7, 9, 10 and 11 are rejected under U.S.C. 103(a) as being unpatentable over Shimamura et al., (U.S. 20030153372 A1), (hereinafter Shimamura), in view of Lee (U.S. 20040198433 A1), (hereinafter Lee).

*Regarding **claim 1**, Shimamura discloses a mobile terminal device with a camera (cellular phone including a camera section, see Par. [0055] and Fig. 7A-D) comprising: two casings which are overlapped on each other (see casings 300 and 100, Fig. 7B);*

connecting section (biaxial hinge 300, see Fig. 1A-C) for connecting said two casings so that said two casings rotate around an axial line in parallel with a direction in which said two casings are overlapped (see Par. [0069]); and

a camera (see item 121, Fig. 3C); but fails to teach that the camera module having a lens and an image-taking element so as to form an optical axis passing through said lens and said image-taking element, said camera module being disposed inside of said connecting section with said optical axis of said camera module substantially coincident with said axial line.

Lee teaches a portable wireless terminal 100 including a camera inside a hinge and a camera lens (see Pars. [0011-15 and 0029]; and Figs. 1 and 3-7).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Lee into the system of Shimamura for the benefit of achieving a portable wireless terminal with expanded range of photographic angle.

Regarding **claim 2**, as recited in claim 1, Shimamura further discloses the mobile terminal device with a camera further comprising:

a display section which displays an image which is taken by said camera module, wherein said display section is disposed so as to be substantially orthogonal to said axial line of either one of said two casings (see Par. [0097] and item 202 in Fig. 7A-D).

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Regarding **claim 3**, as recited in claim 1, Shimamura further discloses the mobile terminal device with a camera further comprising:

a sensor which measures a relative angle made by one of said two casings on which said camera module is disposed and the other of said two casings on which said display section is disposed, wherein an image which is taken by said camera module is displayed on said display section in a rotated manner according to the measurement result by said sensor (camera sense user image and records his/her image and displays the image on the display unit 202, see Par [0076-77 and 0097]).

Regarding **claim 5**, as recited in claim 3, Shimamura further discloses the mobile wherein an image which is taken by said camera module is rotated by 90 degrees with no change to the aspect ratio of said image and then is displayed on said display section when the measurement result is that said relative angle is 90 degrees (display control section 114 control and convert the displayed content, (see Par. [0070-71]).

Regarding **claim 6**, as recited in claims 1, Shimamura further discloses the mobile terminal device with a camera is a portable telephone see Fig. 7A-D).

*Regarding **claim 7**, Shimamura discloses a mobile terminal device with a camera (cellular phone including a camera section, see Par. [0055] and Fig. 7A-D), comprising:*

two casings which can be overlapped on each other (see casings 300 and 100, Fig. 7B);

a connecting section (biaxial hinge 300, see Fig. 1A-C) for connecting said two casings so that said two casings rotate around an axial line in parallel with a direction in which said two casings are overlapped, wherein said connecting section has a fixed base member which is fixed on one of said two casings and a movable base member which is fixed on the other of said two casings and is fit in the peripheral surface of said fixed base member rotatably around said axial line (see Fig. 3A);

a hollow space provided in said fixed base member (biaxial hinge with metal pivot shaft, see Par. [0045]), but fails to teach the camera module having a lens and an image-taking element so as to form an optical axis passing through said lens and said image-taking element, said camera module being disposed inside of said hollow space, with said optical axis substantially coincident with said axial line.

Lee teaches a portable wireless terminal 100 including a camera inside a hinge and a camera lens (see Pars. [0011-15 and 0029]; and Figs. 1 and 3-7).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Lee into the system of Shimamura for the benefit of achieving a portable wireless terminal with expanded range of photographic angle.

Regarding **claim 9**, as recited in claim 1, Shimamura further discloses the mobile terminal device with a camera is a portable telephone (see Fig. 7A-D).

Regarding **claim 10**, as recited in claim 1, Shimamura further discloses the mobile terminal device with a camera further comprising a image-capturing window formed on

one of said two casings at a position facing to said lens (camera 121, see Fig. 3C and Par. 0077).

Regarding **claim 11**, as recited in claim 7, Shimamura further discloses the mobile terminal device with a camera further comprising a image-capturing window formed on one of said two casings at a position facing to said lens (camera 121, see Fig. 3C and Par. 0077).

5. Claim 4 is rejected under U.S.C. 103(a) as being unpatentable over Shimamura in view of Lee and further in view of Priestman et al. (20050245288 A1) (hereinafter Priestman).

Regarding **claim 4**, as recited in claim 2, the combination of Shimamura and Lee fail to teach that said camera module is fixed to said casing in which said display section is disposed.

Priestman teaches that said cameral module is fixed to said casing in which said display section is disposed (see Par. [0061] and Fig. 2B, item 124).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Priestman into the system of Shimamura and Lee for the benefit of achieving a mobile telephone handset that includes a camera that is protected by the door cover of the handset.

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6. Claim 8 is rejected under U.S.C. 103(a) as being unpatentable over Shimamura in view of Lee and further in view of Priestman and further in view of Wakabayashi et al. (U.S. 5,666,565), (hereinafter Wakabayashi).

Regarding **claim 8**, as recited in claim 7, the combination of Shimamura, Lee and Priestman fail to teach that the mobile terminal device with a camera further comprising: a fixed cylinder as part of said camera module, which acts as a casing for said camera module; a cam cylinder as part of said camera module, which is fit in the peripheral surface of said fixed cylinder movably along said axial line; a linear groove provided on the peripheral wall of said fixed cylinder in parallel with said axial line; a cam groove provided on the peripheral wall of said cam cylinder in parallel with said axial line; and a pin provided with a lens on the tip thereof, which penetrates said linear groove to connect with said cam groove movably along said axial line.

Wakabayashi teaches a fixed cylinder (4) as part of said camera module, which acts as a casing for said camera module;

a cam cylinder as part (16) of said camera module, which is fit in the peripheral surface of said fixed cylinder movably along said axial line;

a linear groove (10a) provided on the peripheral wall of said fixed cylinder in parallel with said axial line;

a cam groove (16a) provided on the peripheral wall of said cam cylinder in parallel with said axial line; and

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a pin provided with a lens on the tip thereof (lens group 12), which penetrates said linear groove to connect with said cam groove movably along said axial line (see column 4, lines 20-60).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Wakabayashi into the system of Shimamura, Lee and Priestman for the benefit of achieving a portable terminal device that includes camera with focal length varying mechanism.

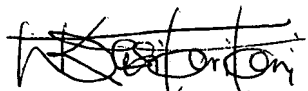
Conclusion

7. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is 571-272-8566. The examiner can normally be reached on M-F (8 am - 4pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Rafael Pérez-Gutiérrez* can be reached on 571-272-7915. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8566. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kwasi Karikari
Patent Examiner.
06/24/2007

JEAN GELIN
PRIMARY EXAMINER

